

MATERIAL SAFETY DATA SHEET

DRILL-LUBE GT™

SECTION 1: IDENTIFICATION

PRODUCT NAME: DRILL-LUBE GT
PRODUCT USE: Lubricant
Surfactant

MANUFACTURER: Drillchem Drilling Solutions, LLC
4301 South Loop 336 East
Conroe, TX 77301
USA

TELEPHONE: 281-713-8941

IN CASE OF EMERGENCY: 1-800-424-9300 (CHEMTREC)
1-703-527-3887 (CHEMTREC – International)

EFFECTIVE DATE: December 15, 2012

SUPERCEDES: January 1, 2007

SECTION 2: HAZARDOUS INGREDIENTS

<u>Name</u>	<u>CAS no.</u>	<u>Weight%</u>
Canola Oil	120962-03-0	60 – 75%
Tall Oil Fatty Acids	61790-12-3	100%

SECTION 3: PHYSICAL PROPERTIES

Physical State: Liquid

Odor: Mild, sweet

Freezing Point: N/A

Flash Point: 200C (400F)

Pour Point: <= -18C (0F)

Specific Gravity: 0.928 at 25/20 C

Vapor Pressure (mm Hg.): Approximately 1 mm hg pressure at 180 C

Melting Point: Not determined

Vapor Density (Air = 1): N/A

Evaporation Rate (Butyl Acetate = 1): N/A

Solubility: Oil

Appearance and Color: Light blue to yellow opaque liquid at 25 C

pH: 7 - 9

SECTION 4: REACTIVITY DATA

Stability: Generally stable

Hazardous Polymerization: None likely

Conditions And Materials To Avoid: Avoid contact with strong oxidizing agents and strong alkalis.

Hazardous Decomposition or Byproducts: Decomposition may produce carbon monoxide and carbon dioxide and or thick smoke.

SECTION 5: FIRE AND EXPLOSION DATA

Flash Point (Method Used) Cleveland Open Cup: 200C (400F)

Flammable Limits In Air (% By Volume):

Lower: Not established

Upper: Not established

NFPA Rating: No NFPA rating

Special Fire Fighting Procedures And Precautions: (Individuals should perform only those firefighting procedures for which they have been trained.) Water or foam may cause frothing when applied to flammable liquids having flash points above 212 F (100 C). The remark is included only as a precaution and does not mean that water or foam should not or could not be used in fighting fires in such liquids. The frothing may be quite violent and could endanger the life of the fire fighter particularly when solid streams are directed into the hot burning liquid. On the other hand, water spray carefully applied has frequently been used with success in extinguishing such fires by causing the frothing to occur only on the surface and this foaming action blankets and extinguishes the fire. (NFPA 325M-1984)

Unusual Fire and Explosion Hazards: Fire fighters should wear self-contained breathing apparatus in the positive-pressure mode with a full

face piece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products.

SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

Ingestion: If victim is conscious and able to swallow, quickly have victim drink water or milk to dilute. Do not give sodium bicarbonate, fruit juices or vinegar. Never give anything by mouth if victim is unconscious or having convulsions. Induce vomiting only if advised by physician or poison control center. Call physician or poison control center immediately.

Skin Contact: Immediately flush skin with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes. Do not let victim rub eyes. Get medical attention immediately.

Inhalation: Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention immediately.

SECTION 7: HEALTH HAZARD INFORMATION

Inhalation: Over-exposure by inhalation may cause respiratory irritation.

Ingestion: LD50:>10 g/kg (Albino rats) (Stearic, Oleic, Linoleic, and Palmitic Acids)

Ingestion may cause an allergic reaction, nausea, vomiting or diarrhea. High doses of soluble salts induce giddiness and nausea. Large doses may cause acute gastrointestinal tract irritation, with vomiting and diarrhea (dogs). Chronic dosing of inorganic salts is well tolerated by rodents.

Eye Contact: Stearic-palmitic mixtures produced only mild conjunctival erythema in two of six rabbits at the 24 and 48-hour readings. No other signs of irritation were observed. All signs of irritation had subsided completely at the 72-hour reading. Oleic acid produced mild conjunctivitis in five of six rabbits. No other irritative signs were observed and all except one rabbit showed no irritative signs at the 72-hour reading. Certain salts may cause eye irritation or conjunctivitis.

Skin Contact: Exposure to stearic-palmitic acid mixtures caused no signs of irritation or corrosivity at either intact or abraded sites on albino rabbits. Exposure to oleic acid resulted in very slight erythema in six intact and six abraded sites on albino rabbits at the 24-hour reading only. No edema was observed at either observation. Prolonged or repeated contact of certain salts with the skin may result in an allergic reaction (dermatitis) in sensitive individuals. Primary irritation index for stearic, palmitic and oleic acids was 0.0-0.5. 75 mg of stearic acid applied intermittently to human skin over a 3-day period resulted in mild irritation. 500 mg of stearic acid applied to rabbit skin over a 24-hour period resulted in moderate irritation. 15 mg of oleic acid intermittently applied to human skin over a 3-day period resulted in moderate irritation. 500 mg of oleic acid applied to rabbit skin in an open draize test resulted in mild irritation.

SECTION 8: ACCIDENTAL RELEASE AND DISPOSAL PROCEDURES

Environmental Precautions: Avoid uncontrolled releases of this material where spills are possible, a comprehensive spill response plan should be developed and implemented.

Spill Or Leak Precautions: Wear appropriate respiratory protection and protective clothing as described in Section IX. Contain spilled material. Transfer to secure containers. Where necessary, collect using absorbent media. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations. Reportable quantity is 16,000 gallons.

Waste Disposal: All recovered material should be packaged, labeled, transported, and disposed or reclaimed in conformance with applicable laws



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and regulations and in conformance with good engineering practices. Avoid landfilling of liquids. Reclaim where possible.

RQ: 16,000 gallons

SECTION 9: HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Put on appropriate personal protective equipment (see section 10). Wear appropriate respirator when ventilation is inadequate. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid exposure – obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Avoid release to the environment. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 4) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 10: PROTECTION INFORMATION

Measures: Handle in the presence of adequate ventilation.

Respiratory Protection: Recommended exposure limits (i.e., OSHA-PEL and ACGIH-TLV) have not been established for this material. Whether there is a need for respiratory protection under your conditions of handling of this material should be evaluated by a qualified health specialist.

Protective Clothing: Wear gloves and protective clothing which are impervious to the product for the duration of anticipated exposure if there is potential for prolonged or repeated skin contact.

Eye Protection: Wear safety glasses meeting the specifications of ANSI Standard Z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specifications of ANSI Standard Z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes.

SECTION 11: SPECIAL PRECAUTIONS

Store in well-ventilated area. Store away from heat and moisture, and out of sunlight. Area should be protected from contamination by corrosive fumes. Should be stored away from fire hazard areas. Best if stored in sealed containers.

Storage area should not contain drain to which toxicant could be flushed. Containers should be sealed as tightly as possible. Inspect periodically for deficiencies. A spill control plan should be provided.

Isolate from acids and acid fumes, corrosives, fire hazards, heat and moisture. Since emptied containers retain product residue, all hazard precautions described on this MSDS must be observed. Keep in covered containers and do not store near heat or open flames.

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as warranty or representation for which DRILLCHEM bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

SECTION 12: TOXICOLOGICAL INFORMATION

Acute Toxicity

Substance	Test Type	Species
Dose		
Isopropyl Alcohol	LD50 Oral	Mouse
3,600 mg/kg		
	LD50 Oral	Rat
5,000 mg/kg		
	LD50 Oral	Rabbit
6,410 mg/kg		
	LC50 Inhalation	Rat
72,600 mg/m3		
	LD50 Dermal	Rabbit
12,800 mg/kg		

Irritation/Corrosion

Not Available

Carcinogenicity

Component	IARC	NTP
OSHA		
Nickel	2B	Possible

SECTION 13: ECOLOGICAL INFORMATION

N/A. No ecological information is available on this product.

SECTION 14: DISPOSAL CONSIDERATIONS

Recover and reuse if possible. Dispose of in certified landfill or incineration under conditions that meet all applicable federal, state and local regulations.

SECTION 15: TRANSPORT INFORMATION

Proper Shipping Name: Not regulated by DOT as a hazardous material

Hazard Class: None.

UN Number: None.

Packing Group: None.

SECTION 16: REGULATORY INFORMATION

OSHA (29 CFR 1910.1200) This product should not be included in a hazard communication program.

RCRA: If this product becomes a waste, it should not be characterized as a hazardous waste as prescribed by RCRA.

CERCLA: Not subject to reporting

SARA 313: This product does not contain chemicals subject to the reporting requirements of Section 313.

NFPA Hazard Codes: Health: 1, Flammability: 1, Reactivity: 0, Special Hazards: 0

Drillchem believes the information contained in the MSDS to be accurate at the time of preparation and has been compiled using sources believed to be reliable. However, Drillchem makes no warranty, either expressed or implied, concerning the accuracy or completeness of the information presented. It is the responsibility of the user to comply with local, state and federal regulations concerning use of this product. It is the further responsibility of the buyer to research and understand safe methods of storing, handling and disposal of this product.